



Water-Data Report 2008

01377500 PASCACK BROOK AT WESTWOOD, NJ

HACKENSACK RIVER BASIN

LOCATION.--Lat 40°59'34", long 74°01'16" referenced to North American Datum of 1983, Westwood Borough, Bergen County, NJ, Hydrologic Unit 02030103, on right bank 75 ft upstream from bridge on Harrington Avenue in Westwood, 500 ft downstream from Musquapsink Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--29.6 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WDR NJ-87-1:1984 (P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 28.62 ft above NGVD of 1929.

COOPERATION.--Gage-height record collected in cooperation with United Water New Jersey.

REMARKS.--Records fair. Flow regulated by Woodcliff Lake 3.0 mi above station (see 01377450). Water diverted for municipal supply by United Water New York (formerly Spring Valley Water Company), by pumpage from well fields in headwater area of Pascack Brook, in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake, probably reduces flow past this station. Between water years 1966 to 1989, water was diverted from Saddle River to Musquapsink Brook (see 01390520) that then entered Pascack Brook 500 feet upstream of gage. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s (revised) and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 27	1600	574	3.50
Dec 24	0215	872	4.10
Feb 2	0115	852	4.06
Feb 13	1430	1,270	4.82
Mar 8	2045	979	4.31
Aug 6	1245	1,110	4.55
Sep 7	0100	*1,320	*4.90

Water-Data Report 2008
01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	16	29	36	93	168	52	61	38	41	38	28	43
2	17	29	32	70	294	63	89	40	40	53	74	50
3	19	29	47	44	61	79	48	38	42	47	58	46
4	18	27	35	37	46	101	98	38	61	29	25	24
5	17	29	34	36	57	208	83	37	47	70	28	41
6	16	39	35	40	73	118	43	36	46	31	250	398
7	15	33	36	39	48	126	44	36	46	29	70	520
8	15	29	36	39	37	457	33	36	46	26	44	110
9	22	28	33	36	38	276	39	72	45	36	30	132
10	42	32	39	34	46	91	42	63	45	33	25	103
11	43	28	43	107	40	68	40	40	47	35	29	57
12	58	29	44	68	38	66	73	40	43	35	33	28
13	29	34	44	44	682	63	49	38	43	31	33	28
14	22	31	45	70	250	60	41	37	50	44	42	21
15	25	40	46	51	91	65	42	36	59	33	80	20
16	25	34	45	41	97	59	44	74	51	34	91	19
17	31	29	38	38	85	53	44	65	61	29	22	18
18	29	27	41	66	166	63	44	67	44	22	24	18
19	26	30	43	52	130	134	44	54	33	25	28	17
20	37	34	45	43	62	185	42	49	27	22	27	16
21	24	36	45	35	51	69	38	48	37	23	31	16
22	23	39	45	34	56	60	38	44	54	23	33	18
23	20	30	126	34	60	55	38	43	40	49	29	21
24	20	28	346	34	59	47	37	42	42	157	33	21
25	25	28	72	33	58	47	37	41	40	72	34	22
26	28	49	65	32	96	47	36	42	41	73	34	250
27	240	52	141	35	125	47	37	55	46	66	26	79
28	74	37	82	41	77	49	54	47	51	34	20	88
29	35	41	136	49	43	47	55	42	66	32	20	91
30	37	39	76	53	---	42	41	41	54	29	19	39
31	38	---	113	48	---	44	---	41	---	34	43	---
Total	1,086	999	2,044	1,476	3,134	2,941	1,454	1,420	1,388	1,294	1,363	2,354
Mean	35.0	33.3	65.9	47.6	108	94.9	48.5	45.8	46.3	41.7	44.0	78.5
Max	240	52	346	107	682	457	98	74	66	157	250	520
Min	15	27	32	32	37	42	33	36	27	22	19	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	41.3	48.9	52.7	54.5	57.6	77.3	77.7	59.9	50.7	45.7	42.7	43.7
Max	158	131	129	151	135	197	198	155	175	180	127	196
(WY)	(2006)	(1978)	(1984)	(1979)	(1973)	(1953)	(1983)	(1989)	(1972)	(1945)	(1971)	(1999)
Min	10.2	9.83	15.8	10.8	15.7	29.3	28.9	21.2	18.2	14.2	10.0	9.45
(WY)	(1942)	(1950)	(1940)	(1954)	(1954)	(2006)	(1991)	(1992)	(1939)	(1944)	(1935)	(1939)

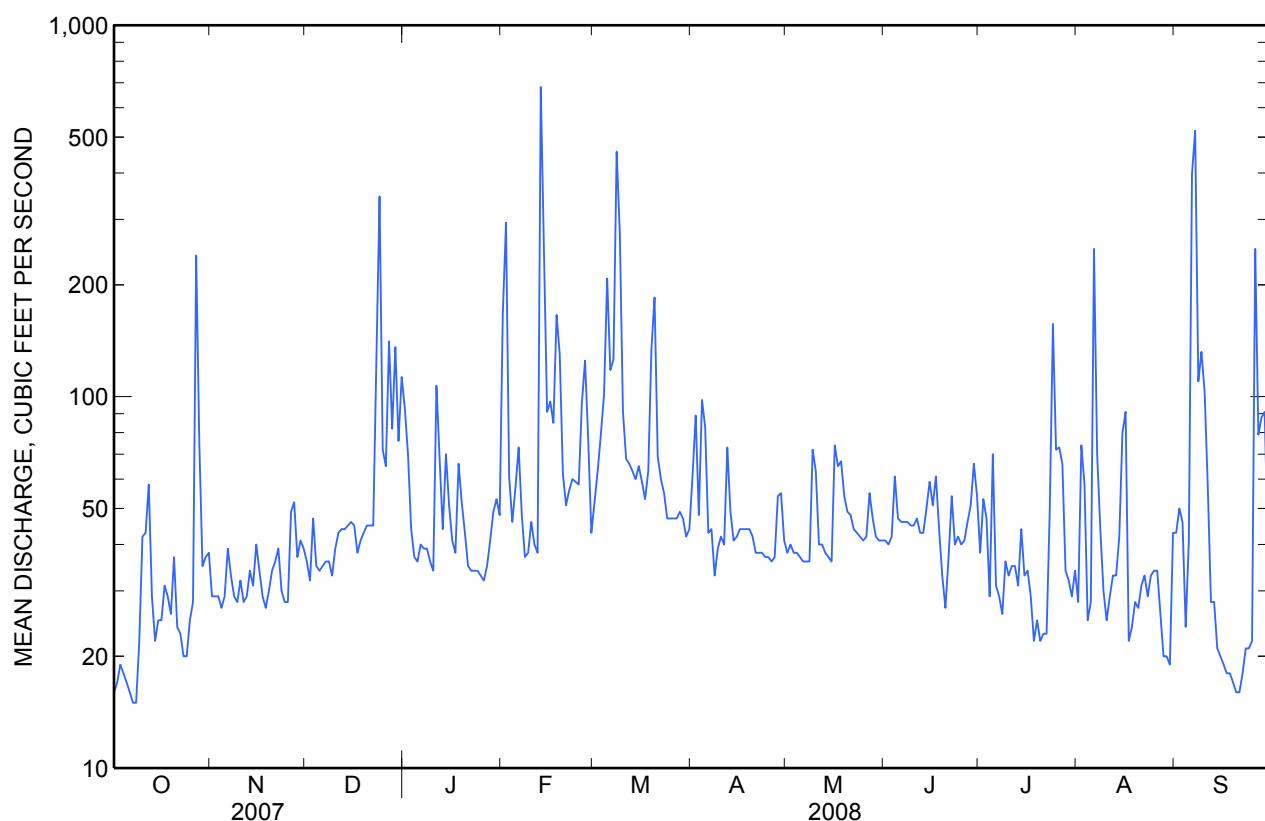
01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2007	Water Year 2008		Water Years 1935 - 2008	
Annual total	22,276	20,953			
Annual mean	61.0	57.2		54.4	
Highest annual mean				88.6	1952
Lowest annual mean				27.6	1965
Highest daily mean	1,950	Apr 16	682	Feb 13	1,950 Apr 16, 2007
Lowest daily mean	15	Oct 7	15	Oct 7, 8	0.45 Apr 26, 1991
Annual seven-day minimum	17	Oct 2	17	Oct 2	6.3 Oct 19, 1949
Maximum peak flow			1,320	Sep 7	a9,630 Sep 16, 1999
Maximum peak stage			4.90	Sep 7	b12.22 Sep 16, 1999
Instantaneous low flow			14	Oct 8	c0.05 Apr 23, 1991
10 percent exceeds	96		91		96
50 percent exceeds	38		42		39
90 percent exceeds	24		25		19

^a From rating curve extended above 3,000 ft³/s on basis of contracted-opening computation of peak flow.

^b From floodmark.

^c Also occurred Sep 28, 1993.



Water-Data Report 2008

01377500 PASCACK BROOK AT WESTWOOD, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1959-76, 1979-80, 1998, 2000, 2006-08.

REMARKS.--Cooperative Network Site Descriptor: Trace Element Assessment (303d) special study site.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 2

[QC, quality control sample. Remark codes: <, less than.]

Date	Time	Sample medium and type	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (00020)
Jan									
10...	1030	QC - Artificial, field blank	--	--	--	--	--	--	--
10...	1100	Surface water, regular	3.0	766	12.2	96	8.0	816	10.6
Mar									
27...	1045	QC - Artificial, field blank	--	--	--	--	--	--	--
27...	1100	Surface water, regular	2.9	764	11.2	95	8.1	749	8.7
Jun									
24...	1000	Surface water, regular	3.7	760	6.2	68	8.1	563	25.0

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 2

[QC, quality control sample. Remark codes: <, less than.]

Date	Mercury water, Temp- ature, water, water, deg C (00010)	Mercury unfltrd water, recover water, filtrd, μg/L (71890)	Mercury -able, μg/L (71900)
Jan			
10...	--	<.010	--
10...	5.3	<.010	<.010
Mar			
27...	--	<.010	--
27...	8.3	<.010	<.010
Jun			
24...	19.9	<.010	<.010